PSYCH305, Fall 2019: Cognitive Processes MW 10:00 AM – 11:15 AM, Hum | Room 524

Instructor: Marcus Cappiello

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Office hour: Wednesday 11:15am~12:15 pm

Suggested Textbook: Gazzaniga, M., Mangun, G. R., & Ivry, R. B. (2019). Cognitive Neuroscience: The Biology of the Mind (Fifth Edition). New York: Norton & Company. Ebook or Loose leaf version may be cheaper than paperback version.

Description: The goal of this course is to provide students with a solid foundation of Cognitive Processes with a strong emphasis on Cognitive Neuroscience, a fascinating new discipline at the intersection of cognitive psychology and neuroscience. In the last few decades our understanding of the neural mechanisms related to perception and cognition has advanced to the stage where it is difficult to understand cognition without reference to the brain. Students taking the class will gain a basic appreciation of the cognitive and neural mechanisms underlying perception, attention, memory, emotion, and higher-level functions. We will consider evidence from disorders produced by brain damage and studies of healthy individual behavior using a variety of methods including cognitive psychology, neuropsychology, functional brain imaging, neurophysiology, non-invasive transcranial stimulation, and electroencephalography.

Prerequisites: Psych 101 (Intro to Psychology), Psych 201 (Stats.), and Psych 202 (Research Methods). Students taking Psychology 305L concurrently must also have completed Psychology 300. The prerequisites must have been completed before enrolling in PSYC 305 and the student must have earned a grade of C or better in each of them.

Class Etiquette: While you are in class, you are expected to be present: turn off your cell phones. Do not come to class if you need to be doing something else. When you come to class, expect to be in the classroom for the entire class duration. If you need to leave early or arrive late due to unusual circumstances, sit in a location that minimizes disruption. Remember that when you engage in an alternative task during class, you not only miss information presented, but disrupt others near you.

Exams: There will be 3 multiple-choice midterms and a final. Midterms are non-cumulative and will each cover approximately one third of the course. The final is cumulative covering all course topics. Exam questions will be drawn exclusively from lecture. Makeup exams will be allowed only for university-mandated and officially verified reasons (e.g., documented illness, mandatory religious obligations, or participation in certain sports events). If the absence can be anticipated in advance of the test date, Professor Cappiello must be notified before the day of the test. If you are ill or have an emergency on the day of the test, you should contact Professor Cappiello before the time of the test, if possible, and as soon as possible otherwise. If you do not contact Professor Cappiello in a timely manner, you will receive a score of 0 for the test.

Quizzes: There will be a quiz every lecture besides review and test days (~23 in total). Each quiz will have two distinct halves. The first half will be ~4 questions testing your knowledge from the previous class. We will be covering a substantial amount of information and it is important for you to study and

test yourself throughout the semester rather than cramming at the end – these quizzes should help. The second half will be testing your knowledge of new material that will be covered immediately after the quiz. This helps you think critically about the information to come, and helps you retain information long after the class. All questions on the quizzes will resemble questions you will see on the midterms and final (not exact replicas, but similar in difficulty and content).

Grading for the first half of the quiz will be lenient, with full points attained if you get half correct. The second half will be graded purely on effort, as you have not seen the material before (unless you read ahead). More information about the quiz grading scheme will be given during the first lecture.

* No make-up quizzes will be allowed, but the single lowest quiz score will be dropped.

Term Paper: Students are required to submit a summary of an empirical study. Students will be given a choice between papers provided by the instructor posted during the third week of class. The assignment will be graded for both content and style (grammar, punctuation, etc.), and must conform to the standards of APA style. The summary should contain approximately 2-3 pages of text (not including title page and references) and should contain an overview of background literature that motivates the questions addressed by the reported research, an overview of methodology, a results summary, a statement of general conclusions (considering heavily the manner in which the reported results inform the conclusions drawn), and a reference section including a citation for the paper that was summarized. Papers submitted after the deadline (12/9) will incur a late penalty of 10% per 24 hour period or portion thereof. Please avoid plagiarism. Submit via Titanium.

Three Short Papers: Over the course of the semester, we will cover historical, theoretical, and methodological aspects of the field. Cognitive psychology does not exist in a vacuum, however, but has the potential to inform our understanding of various aspects of our daily lives. With this observation in mind, each student is to submit *three* short papers (maximum of 2 pages double-spaced, 1 inch margins, APA formatted) in which you link some principle or phenomenon you have learned about this semester to some aspect of society (education, economics, sports, etc.). The purpose of this paper is to foster your understanding of the continuity that exists between the core topics of cognitive psychology and your daily life. It will furthermore require you to think critically about what you hear and read in everyday life. More details about the specific requirements of this assessment will be given in class and on the website. Although not necessary, you may supplement your analysis with information taken from primary source materials (empirical journal articles) and media-based sources. If you do, please be sure to cite these sources in APA style. Students are to upload their paper to Titanium by on the dates listed in the calendar below. Papers submitted after this deadline will incur a late penalty of 10% per 24 hour period or portion thereof. Please avoid plagiarism. Submit via Titanium.

Grading:

Midterms 30% (10% each)

Quizzes 10%

Short Papers 15% (5% each)

Final 30% Term Paper 15%

Grade cut-offs, in percentages:

A+: 97 A: 93 A-: 90 B+: 87 B: 83 B-: 80 C+: 77 C: 73 C-: 70 D+: 67 D: 63 D-: 60

below 60: F.

If you are concerned about your performance in the class, please contact me ASAP. It is much easier to deal with a problem before an exam or the end of the quarter than afterward.

Tentative Schedule:

Week	Topic	Notes
1 (8/26)	Introductions What is cognitive psychology?	
	History	
2 (9/2)	Methods	
3 (9/9)	Sensation and Perception	
4 (9/16)	Object recognition	Review – 9/18 Short paper 1 due – 9/18
5 (9/23)	Hemisphere specialization	Midterm 1 – 9/23
	Tremisphere specialization	• Intro – Obj. Rec.
6 (9/30)	Attention	muo – Ooj. Rec.
7 (10/7)	Memory	
8 (10/14)	Knowledge	Review – 10/16
		Short paper 2 due – 10/16
9 (10/21)	Language	Midterm 2 – 10/21 • Attention – Knowledge
10 (10/28)	Emotion	
11 (11/4)	Cognitive Control	
12 (11/11)	Social cognition	Review – 11/13
	Social cognition	Short paper 3 due – 11/13
13 (11/18)	Problem solving	Midterm 3 – 11/18
		• Language – Social Cog.
14 (11/25)	No Class (Thanksgiving)	
15 (12/1)	Decision making/reasoning	
16 (12/9)	Consciousness	Empirical paper due 12/9 Review – 12/11
17 (12/16)	Finals Week	Final – 12/16 (11am-12:15pm) • Cumulative